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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,182	07/06/2000	Alexander S. Kozlov	H16-26603	5067

7590

01/28/2003

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EXAMINER

BARR, MICHAEL E

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 01/28/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/611,182

Applicant(s)

KOZLOV ET AL.

Examiner

Michael Barr

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4,7,9-23,25 and 26 is/are rejected.
- 7) ☒ Claim(s) 5,6 and 8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Board of Appeals Decision

1. In light of the reversal of the examiner's prior art rejection by the Board of Appeals, in the decision mailed 1/21/03, the finality of that rejection is withdrawn. As per the comments by the Board of Appeals in the decision of 1/21/03, a new grounds of rejection follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7, 9-21, 23, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 58204168 by Torikai et al. ("Torikai") in view of Chang et al.

Torikai teaches electrolessly plating a substrate, such as a glass, metal, or ceramic, with a platinum-rhodium alloy, by dipping the substrate in an aqueous, electroless platinum-rhodium plating solution bath, which comprises a platinum salt, a rhodium ammine salt, ammonium hydroxide, and hydrazine hydrate, where the components of the bath can be supplied in the claimed concentrations and where the platinum salt can be a platinum ammine salt and the rhodium ammine salt can be a rhodium ammine nitrite salt (Pg. 3, paragraphs 3-4; Pg. 4, paragraphs 2-3; Pg. 6 paragraph 6; Example 4). Torikai indicates that the plating solution can be used for providing plating layers for electronics or electrical contacts, which suggests that the

Art Unit: 1762

plating layers formed are uniform, as is typically desired for electronics and electrical contacts (Pg. 7, paragraph 6). The electroless plating process of Torikai does not utilize electrolysis and is autocatalytic. Torikai teaches that the plating bath can be at a temperature of 70°C (Example 4).

Torikai does not teach that the platinum ammine salt is a platinum ammine-nitrite salt. Chang et al. teaches an electroless platinum plating solution utilizing ammonium hydroxide and hydrazine hydrate, where the platinum salt is platinum diammine dinitrite (Claim 9). The platinum diammine dinitrite of Chang et al. meets the platinum salt limitations of the applicant's Claims 1-2 and 4. It would have been obvious to one skilled in the art to use a conventional platinum ammine salt in the process and solution of Torikai with the expectation of providing the desired results. It would have been obvious to one skilled in the art to use the platinum diammine dinitrite of Chang et al., as the platinum salt material in Torikai, with the expectation of providing the desired electroless plating results, since it is shown by Chang et al. that platinum diammine dinitrite is a known platinum ammine salt for use in electroless plating solutions containing ammonium hydroxide and hydrazine hydrate.

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torikai and Chang et al. as applied to claim 11 above, and further in view of Ishihara et al.

Torikai and Chang et al. do not teach that the substrate is a semiconductor. Ishihara et al. teaches applying a platinum-rhodium alloy plating over a substrate comprising a semiconductor material (Col. 2, lines 45-60). The substrate described by Ishihara et al. meets the limitations of Claim 22. It would have been obvious to one skilled in the art to use a substrate, such as that of Ishihara et al. to be platinum-rhodium alloy plated by the plating solution of Torikai and Chang

Art Unit: 1762

et al., with the expectation of providing the desired plating results, since it is shown by Ishihara et al. that such a substrate is conventionally plated with platinum-rhodium alloy.

Allowable Subject Matter


5. Claims 5-6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Barr whose telephone number is 703-305-7919. The examiner can normally be reached on Monday-Thursday 6:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 or 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Michael Barr
Primary Examiner
Art Unit 1762

MB
January 27, 2003